

WHAT IS CLAIMED IS:

1. A pressure sensor comprising:
  - a pair of base films;
  - a plurality of electrodes, which are located between the base films;
  - a layer of pressure-sensitive resistor, which is located between the base films to be distant from one of the electrodes by a predetermined gap;
  - a spacer, which is located outside the layer of pressure-sensitive resistor between the base films and used for forming the gap; and
  - a projection, which is located on an outer surface of at least one of the base films in order to decrease the lowest pressure that can be detected by the pressure sensor, wherein a contact state between the layer of pressure-sensitive resistor and one of the electrodes varies to vary a resistance between the electrodes when a pressure acts on the projection.
2. The pressure sensor according to claim 1, wherein the projection is located right above an area that is substantially surrounded by the spacer.
3. The pressure sensor according to claim 2, wherein the projection is made of a rubber or a resin.
4. The pressure sensor according to claim 1, wherein a surface of the spacer that face one film out of the base films is connected

to the one film with one of the electrodes therebetween in order to stabilize the predetermined gap.

5. The pressure sensor according to claim 1, wherein each of the base film has a slit that is located outside the spacer to surround the spacer.

6. A pressure sensor comprising:

first and second base films;

a pair of electrodes, which are located between the base films;

a layer of pressure-sensitive resistor, which is located between the base films to be distant from one of the electrodes by a predetermined gap;

a spacer, which is located outside the layer of pressure-sensitive resistor between the base films and used for forming the gap; and

a reinforcing sheet, which is made of a material having a rigidity or a elastic modulus equal to or higher than the base films and located on an outer surface of the second base film such that a deformability of the first base film when a pressure acts on the first base film becomes substantially constant irrespective of specifications of an article in which the pressure sensor is placed, wherein a contact state between the layer of pressure-sensitive resistor and one of the electrodes varies in response to the pressure to vary a resistance between the electrodes.

7. The pressure sensor according to claim 6 further comprising a projection, which is located on at least an outer surface of one of the base films in order to decrease the lowest pressure that can be detected by the pressure sensor.

8. The pressure sensor according to claim 7, wherein the projection is located right above an area that is substantially surrounded by the spacer.

9. The pressure sensor according to claim 8, wherein the projection is made of a rubber or a resin.

10. The pressure sensor according to claim 6, wherein a surface of the spacer that face one film out of the base films is connected to the one film with one of the electrodes therebetween in order to stabilize the predetermined gap.

11. The pressure sensor according to claim 6, wherein each of the base film has a slit that is located outside the spacer to surround the spacer.

12. A pressure sensor comprising:  
first and second base films;  
a plurality of electrodes, which are located between the base films;

a layer of pressure-sensitive resistor, which is located between the base films to be distant from one of the electrodes

by a predetermined gap; and

a spacer, which is located outside the layer of pressure-sensitive resistor between the base films and used for forming the gap,

wherein the second base film has a rigidity or an elastic modulus higher than the first base film such that a deformability of the first base film when a pressure acts on the first base film becomes substantially constant irrespective of specifications of an article in which the pressure sensor is placed and wherein a contact state between the layer of pressure-sensitive resistor and one of the electrodes varies in response to the pressure to vary a resistance between the electrodes.

13. The pressure sensor according to claim 12 further comprising a projection, which is located on an outer surface of one of the base films in order to decrease the lowest pressure that can be detected by the pressure sensor.

14. The pressure sensor according to claim 13, wherein the projection is located right above an area that is substantially surrounded by the spacer.

15. The pressure sensor according to claim 14, wherein the projection is made of a rubber or a resin.

16. The pressure sensor according to claim 12, wherein a surface of the spacer that face one film out of the base films is

connected to the one film with one of the electrodes therebetween in order to stabilize the predetermined gap.

17. The pressure sensor according to claim 12, wherein each of the base film has a slit that is located outside the spacer to surround the spacer.